

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/855,626	05/15/2001	Harm Jan Willem Belt	PHNL 000297	9253
24737 7	7590 08/12/2005		EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			GRIER, LAURA A	
P.O. BOX 300	DX 3001 CLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER
DRIARCEIT	WANOK, 141 10510		2644	
		•	DATE MAILED: 08/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comments	09/855,626	BELT ET AL.				
Office Action Summary	Examiner	Art Unit				
	Laura A. Grier	2644				
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).		nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11	<u>May 2005</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	is action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) <u>1-11</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrest s) ⊠ Claim(s) <u>4-7 and 10</u> is/are allowed.  6) ⊠ Claim(s) <u>1-3,8 and 9</u> is/are rejected.  7) ⊠ Claim(s) <u>11</u> is/are objected to.  8) □ Claim(s) are subject to restriction and are	awn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examir	ner.					
0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the		• •				
The state of the s	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bure: * See the attached detailed Office action for a list	nts have been received.  Ints have been received in Application  Ority documents have been receive  au (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ul>	6) Other:	atent Application (PTO-152)				

Application/Control Number: 09/855,626 Page 2

Art Unit: 2644

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- 1. Claims 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 2. Claim 8 recites the limitation "the adaptive filter" in line 9. There is insufficient antecedent basis for this limitation in the claim.
- 3. Claim 9 recites the limitation "the second adaptive echo canceller section" in line 2.

  There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Rasmusson et al., U. S. Patent No.6549627.

Regarding claim 1, Rasmusson et al. (herein, Rasmusson) discloses generating calibration signals for an adaptive beamformer (figures 5 and 6). Rasmusson's disclosure comprises a method and system of multiple inputs (405, and 405) coupled to an adaptive

Art Unit: 2644

beamformer (417), which is used as acoustic echo canceller (abstract), wherein the echo canceling data is maintained in the adaptive filters (415/413) – memory, which reads kept data of individual history of each input signal, wherein the echo data is supplied to the beamformer, which reads on combined with current adaptive beamforming data (col. 3, lines 9-20, and col. 5, lines 8-64, lines 67 - col. 7, lines 1-14).

Regarding **claim 2**, Rasmusson discloses everything claimed as applied above (see claim 1). Rasmusson discloses in figures 5 and 6 respective inputs in parallel paths containing an acoustic path and beamformer path, where the signal paths are summed with adders and processed by the adaptive filters and beamformer.

Regarding **claim 3**, Rasmusson discloses everything claimed as applied above (see claim 1). Rasmusson further discloses the beamformer as an echo canceller, thus the adaptive beamformer comprises filtering (col. 6, lines 36-41).

### Allowable Subject Matter

- 6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claims 8-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
- 8. Claims 4-7, and 10 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 4 and 10, respectively, the prior art of record is drawn to a beamformer and an echo canceller coupled to together for processing acoustics inputs. However, the prior art of record fails to specifically disclose or fairly suggest the beamformer and echo canceller working simultaneously, therein as claimed.

# Response to Arguments

9. Applicant's arguments, see page 6, filed 5/11/05, with respect to claims have been fully considered and are persuasive. The rejection and objection of claims 4-10 has been withdrawn.

The applicant argues on page 5 that the beamformer of Rasmusson et al. is a fixed beamformer and not adaptive, in respect to figure 5 and 6. Rasmusson's disclose indicates that the beamformer becomes adapted at the time of calibration, which constitutes the beamformer being adaptive (col. 5, lines 67 and col. 6, lines 1-17). And the applicant also argued that the echo canceller of figure 5 is fixed, however, the echo canceller of figure 6 can be adaptive or fixed. Thus, the Rasmusson et al. rejection has been maintained for claims 1-3.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2644

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura A Gri&r
Primary Examiner
Art Unit 2644